AUTHOR INDEX

Volumes 28–30 1977

ALCOCK, W. G. and MILE, B.: Gas-Phase Reactions of Alkylperoxy and Alkoxy Radicals Part I. The Photoinitiated Oxidation of 2, 3-Dimethylbutane, **29**, 133.
AMOS, D. E.: *See* NUNZIATO, J. W.
ANNAMALAI, K. and DURBETAKI, P.: A Theory on Transition of Ignition Phase of Coal Particles, **29**, 193.
ARORA, A. J.: *See* GIRDHAR, H. L.
ATRI, G. M., BALDWIN, R. R., JACKSON, D., and WALKER, R. W.: The Reaction of OH Radicals and HO_2 Radicals with Carbon Monoxide **30**, 1.

BAKER, RICHARD R.: Combustion and Thermal Decomposition Regions Inside a Burning Cigarette, **30**, 21.
BALAKHNINE, V. P., VANDOOREN, J., and VAN TIGGELEN, P. J.: Reaction Mechanism and Rate Constants in Lean Hydrogen-Nitrous Oxide Flames, **28**, 165.
BALDWIN, R.R.: *See* ATRI, G. M.
BALDWIN, R. R., PLAISTOWE, J. C., and WALKER, R. W.: The Mechanism of Conjugate Alkene Formation and the Importance of Surface Reactions in Hydrocarbon Oxidation, **30**, 13.
BECKSTEAD, M. W., PETERSON, N. L., PILCHER, D. T., HOPKINS, B. D., and KRIER, H.: Convective Combustion Modeling Applied to Deflagration-to-Detonation Transition of HMX, **30**, 231.
BILGER, R. W.: Reaction Rates in Diffusion Flames, **30**, 277.
BIRCHLEY, J. C. and RILEY, N.: Transient Evaporation and Combustion of a Composite Water-Oil Droplet, **29**, 145.
BOSE, T. K.: *See* SUHAS, H. K.
BRAY, K. N. C. and MOSS, J. B.: A Closure for the Turbulent Premixed Flame with Sequential Chemistry, **30**, 125.
BUCKMASTER, J.: *See* NORMANDIA, M. J.
BUCKMASTER, J.: Slowly Varying Laminar Flames, **28**, 225.
BULL, D. C., PYE, D. B. and QUINN, C. P.: Autoignition and Cool-Flame Behaviour in a Convective System, **28**, 207.
BURCAT, ALEXANDER: Calculation of the Ignition Delay Times for Methane-Oxygen-Nitrogen Dioxide-Argon Mixtures, **28**, 319.
BURCAT, ALEXANDER: Reply to Michael W. Slack's Comment, **30**, 327.

CHAIKEN, ROBERT F.: *See* KANSA, EDWARD J.
CHANDRA, A.: *See* SODHA, M. S.
CLAIRMONT, JR., A. R.: *See* PRICE, DONNA.
CLEMENTS, R. M.: *See* DALE, J. D.
CLEMENTS, R. M.: The Effect of Electrohydrodynamic Boundary Layers on Heat Transfer from Flame Gases, **29**, 33.
CONDON, J. A., RENIE, J. P., and OSBORN, J. R.: Temperature Sensitivity of Propellant Burning Rates, **30**, 267.
COOK, S. J., CULLIS, F. G., and GOOD, A. J.: The Measurement of the Flammability Limits of Mists, **30**, 309.
COOKSON, R. A.: *See* ISAAC, J. J.
COTTEREAU, M. J.: *See* PUECHBERTY, D.
COX, G.: Gas Velocity Measurement in Fires by the Cross-Correlation of Random Thermal Fluctuations–A Comparison with Conventional Techniques, **28**, 155.
CROCE, PAUL A.: *See* MODAK, ASHOK T.
CULICK, F. E. C.: *See* VETTER, A. A.

CULLIS, C. F.: *See* COOK, S. J.
CUNNINGHAM, A. C.: *See* ROPER, F. G.

DALE, J. D., SMY, P. R., WAY-NEE, D., and CLEMENTS, R. M.: Laser-Ignited Internal Combustion Engine, **30**, 319.
DAUBLIN, F.: Electron Impact Induced Dissociative Electron Resonance Capture with Nitrotoluenes, **30**, 103.
DONALDSON, A. B.: *See* SHOUMAN, A. R.
DURBETAKI, P.: *See* ANNAMALAI, K.
DURIE, R. A., MILNE, J. W., and SMITH, M. Y.: The Deposition of Salts from Hydrocarbon Flames Containing Sodium and Sulphur Species, **30**, 221.

FARAZANDEHMEHR, A.: *See* KADOTA, T.
FEDELE, J. B.: *See* MURASZEW, A.
FENG, C. C. and SIRIGNANO, W. A.: Further Calculations Based Upon a Theory of Flame Spread Across Solid Fuels, **29**, 247.
FERGUSON, COLIN R. and KECK, JAMES C.: On Laminar Flame Quenching and Its Application to Spark Ignition Engines, **28**, 197.
FERNÁNDEZ-PELLO, A. and WILLIAMS, F. A.: A Theory of Laminar Flame Spread Over Flat Surfaces of Solid Combustibles, **28**, 251.
FISHER, C. J.: A Study of Rich Ammonia/Oxygen/Nitrogen Flames, **30**, 143.

GAILLARD-CUSIN, F. and JAMES, H.: An Attempt to Correlate the Kinetic and Energetic Data Applying to Excited Species Occurring in Carbon Monoxide Combustion, **30**, 211.
GAL'CHENKO, YU. A.: *See* MERZHANOV, A. G.
GARIBYAN, T. A.: *See* NALBANDYAN, A. B.
GHATAK, A. K.: *See* SODHA, M. S.
GHOSH, A. K. and NATARAJAN, R.: Velocity Histories of Vaporizing Fuel Drops Injected Downward-Effect of Index *n* in the "*Dn*-Law," **29**, 283.
GIRDHAR, H. L. and ARORA, A. J.: Effect of Pressure on Heat of Explosion, **28**, 291.
GIRDHAR, H. L. and ARORA, A. J.: Ignition Delay of Composite Solid Propellants, **28**, 109.
GLASS, M. and KENNEDY, I. M.: An Improved Seeding Method for High Temperature Laser Doppler Velocimetry, **29**, 333.
GLASSMAN, I.: Comments on: Flammability of Plastics-I. Burning Intensity, by A. Tewarson and R. F. Pion, **29**, 103.
GOLLAHALLI, SUBRAMANYAM R.: Buoyancy Effects on the Flame Structure in the Wakes of Burning Liquid Drops, **29**, 21.
GOOD, A. J.: *See* COOK, S. J.
GOODSON, F. P.: *See* HORTON, M. D.
GRIGORJEV, YU. M.: *See* MERZHANOV, A. G.
GRIGORYAN, R. R.: *See* NALBANDYAN, A. B.

HALSTEAD, M. P., KIRSCH, L. J., and QUINN, C. P.: The Autoignition of Hydrocarbon Fuels at High Temperatures and Pressures-Fitting of a Mathematical Model, **30**, 45.
HANDA, T.: *See* YUMOTO, T.
HARDESTY, D. R. and KENNEDY, J. E.: Thermochemical Estimation of Explosive Energy Output, **28**, 45.
HAYHURST, A. N. and KITTELSON, D. B.: Heat and Mass Transfer Considerations in the Use of Electrically Heated Thermocouples of Iridium versus and Iridium/Rhodium Alloy in Atmospheric Pressure Flames, **28**, 301.
HAYHURST, A. N. and KITTELSON, D. B.: Mass Spectrometric Sampling of Ions from Atmospheric Pressure Flames-III: Boundary Layer and Other Cooling of the Sample, **28**, 137.
HAYHURST, A. N., KITTELSON, D. B., and TELFORD, N. R.: Mass Spectrometric Sampling of Ions from Atmospheric Pressure Flames-II: Aerodynamic Disturbance of a Flame by the Sampling System, **28**, 123.
HAYHURST, A. N. and TELFORD, N. R.: Mass Spectrometric Sampling of Ions from Atmospheric Pressure Flames-I: Characteristics and Calibration of the Sampling System, **28**, 67.
HAYNES, B. S.: Reactions of Ammonia and Nitric Oxide in the Burnt Gases of Fuel-Rich Hydrocarbon-Air Flames, **28**, 81.
HAYNES, B. S.: The Oxidation of Hydrogen Cyanide in Fuel-Rich Flames, **28**, 113.

HERDEN, W. and MALY, R.: Interferometric Study of Nonstationary Combustion Using a N_2 Laser (1 bar), **30**, 207.
HERTZBERG, MARTIN: A Comment on the Flame Angle, Double-Burner Technique of Determining Flammability Limits, **28**, 213.
HILLIARD, J. C. and WHEELER, R. W.: Catalysed Oxidation of Nitric Oxide to Nitrogen Dioxide, **29**, 15.
HIRANO, M.: *See* MIRO, Y.
HOMMERT, P. J., and VISKANTA, R., and MELLOR, A. M.: Flame Temperature Measurements by Spectral Remote Sensing, **30**, 295.
HOPKINS, B. D.: *See* BECKSTEAD, M. W.
HORTON, M. D., GOODSON, F. P. and SMOOT, L. D.: Characteristics of Flat, Laminar Coal-Dust Flames, **28**, 187.
HUSSAIN, S. Q.: *See* SODHA, M. S.

ISAAC, J. J. and COOKSON, R. A.: Jet Flames Stabilization in Subsonic and Supersonic Flows, **30**, 187.

JACHIMOWSKI, CASIMIR J.: An Experimental and Analytical Study of Acetylene and Ethylene Oxidation Behind Shock Waves, **29**, 55.
JACKSON, D.: *See* ATRI, G. M.
JACQUES, M. T.: Transient Heating of an Emulsified Water-in-Oil Droplet, **29**, 77.
JAIN, S. R.: Ignition and Thermal Behaviour of Solid Hydrazones, **28**, 101.
JAIN, V. K.: *See* THAPER, K. K.
JAMES, H.: *See* GAILLARD-CUSIN, F.

KADOTA, T., KIROYASU, H. and FARAZAND-EHMEHR, A.: Soot Formation by Combustion of a Fuel Droplet in High Pressure Gaseous Environments, **29**, 67.
KANSA, EDWARD J., PERLEE, HENRY E., and CHAIKEN, ROBERT F.: Mathematical Model of Wood Pyrolysis Including Internal Forced Convection, **29**, 311.
KAPILA, A. K. and LUDFORD, G. S. S.: Two-Step Sequential Reactions for Large Activation Energies, **29**, 167.
KAUSHIK, S. C.: *See* SODHA, M. S.
KECK, JAMES C.: *See* FERGUSON, COLIN R.
KENNEDY, I. M.: *See* GLASS, M.
KENNEDY, J. E.: *See* HARDESTY, D. R.
KENNEDY, J. E.: *See* NUNZIATO, J. W.
KIROYASU, H.: *See* KADOTA, T.
KIRSCH, L. J.: *See* HALSTEAD, M. P.
KITTELSON, D. B.: *See* HAYHURST, A. N.
KLINGENBERG, G.: Investigation of Combustion Phenomena Associated with the Flow of Hot Propellant Gases. III: Experimental Survey of the Formation and Decay of Muzzle Flow Fields and of Pressure Measurements, **29**, 289.
KONEV, E. V. and SUKHININ, A. I.: The Analysis of Flame Spread Through Forest Fuel, **28**, 217.
KRIER, H.: *See* BECKSTEAD, M. W.
KUBY, W. C.: *See* MURASZEW, A.
KULKARNI, S. G.: *See* PANDA, S. P.

LAW, C. K. and LAW, H. K.: Theory of Quasi-Steady One-Dimensional Diffusional Combustion with Variable Properties Including Distinct Binary Diffusion Coefficients, **29**, 269.
LAW, C. K. and SIRIGNANO, W. A.: Unsteady Droplet Combustion with Droplet Heating-II: Conduction Limit, **28**, 175.
LAW, H. K.: *See* LAW, C. K.
LEE, JOHN H. and MATSUI, H.: A Comparison of the Critical Energies for Direct Initiation of Spherical Detonations in Acetylene-Oxygen Mixtures, **28**, 61.
LOCKWOOD, F. C.: The Modelling of Turbulent Premixed and Diffusion Combustion in the Computation of Engineering Flows, **29**, 111.
LUDFORD, G. S. S.: *See* KAPILA, A. K.

MALY, R.: *See* HERDEN, W.
MATSUI, H.: *See* LEE, JOHN H.
MEINEL, H.: *See* STRICKER, W.
MELLOR, A. M.: *See* HOMMERT, P. J.
MERZHANOV, A. G., GRIGORJEV, YU. M. and GAL'CHENKO, YU. A.: Aluminum Ignition, **29**, 1.
MILE, B.: *See* ALCOCK, W. G.
MILNE, J. W.: *See* DURIE, R. A.
MIN, KUN: Vapor-phase Thermal Analysis of Pryolysis Products from Cellulosic Materials, **30**, 285.

MIYAUCHI, T.: *See* MORI, Y.
MODAK, ASHOK, T. and CROCE, PAUL A.: Plastic Pool Fires, **39**, 251.
MODAK, ASHOK, T.: Thermal Radiation from Pool Fires, **29**, 177.
MORI, Y., MIYAUCHI, T., and HIRANO, M.: Catalytic Combustion of Pre-Mixed Hydrogen-Air, **30**, 193.
MORTON, V. M. and NETTLETON, M. A.: Pressures and Their Venting in Spherically Expanding Flames, **30**, 111.
MOSS, J. B.: *See* BRAY, K. N. C.
MUKUNDA, H. S.: *See* RAGHUNANDAN, B. N.
MURASZEW, A., FEDELE, J. B., and KUBY, W. C.: Trajectory of Firebrands in and out of Fire Whirls, **30**, 321.

NALBANDYAN, A. B., OGANESYAN, E. A., GRIGORYAN, R. R., GARIBYAN, T. A., and VARDANYAN, I. A.: The Use of ESR Measurements to Study the Role of the Surface in Acetaldehyde Oxidation, **30**, 177.
NATARAJAN, R.: *See* GHOSH, A. K.
NETTLETON, M. A.: *See* MORTON, V. M.
NETTELTON, M. A.: Shock-Wave Chemistry in Dusty Gases and Fogs: A Review, **28**, 3.
NIIOKA, T. and WILLIAMS, F. A.: Ignition of a Reactive Solid in a Hot Stagnation-Point Flow, **29**, 43.
NORMANDIA, M. J. and BUCKMASTER, J.: Near-Asphyxiated Liquid Fuel Drop Burning, **29**, 277.
NUNZIATO, J. W., KENNEDY, J. E., and AMOS, D. E.: The Thermal Ignition Time for Homogeneous Explosives Involving Two Parallel Reactions, **29**, 265.

OGANESYAN, E. A.: *See* GARIBYAN, T. A.
OGASAWARA, M.: *See* ONUMA, Y.
OLSON, R. E.: Theoretical Chemi-Ionization and Recombination Cross Sections for Reactions of Na and K with Cl, **30**, 243.
ONUMA, Y. and OGASAWARA, M.: An Approach to the Theoretical Description of Turbulent Jet Diffusion Flames-Part I: Combustion Model and Calculation, **30**, 163.
OSBORN, J. R.: *See* CONDON, J. A.

PANDA, S. P., and KULKARNI, S. G.: Furfurylidene Ketones–A New Class of Hypergolic Rocket Fuels with Red Fuming Nitric Acid (RFNA) as Oxidizer, **28**, 25.
PANTON, R. L. and SWEAT, JR., R. H.: Vortex Bursting with Combustion, **30**, 133.
PEBLER, A.: *See* YANNOPOULOS, L. N.
PERLEE, HENRY E.: *See* KANSA, EDWARD J.
PETERSON, N. L.: *See* BECKSTEAD, M. W.
PILCHER, D. T.: *See* BECKSTEAD, M. W.
PLAISTOWE, J. C.: *See* BALDWIN, R. R.
POLYMEROPOULOS, C. E. and SERNAS, V.: Measurement of Droplet Size and Fuel-Air Ratio in Sprays, **29**, 123.
POPE, S. B.: The Implications of the Probability Equations for Turbulent Combustion Models, **29**, 235.
PRICE, DONNA and CLAIRMONT, JR., A. R.: Explosive Behavior of Simplified Propellant Models, **29**, 87.
PUECHBERTY, D. and COTTEREAU, M. J.: Measurement of Absolute Number Density Profiles of CN in a Low Pressure Flame, **29**. 99.
PYE, D. B.: *See* BULL, D. C.

QUINN, C. P.: *See* BULL, D. C.
QUINN, C. P.: *See* HALSTEAD, M. P.

RAGHUNANDAN, B. N. and MUKUNDA, H. S.: The Problem of Liquid Droplet Combustion–A Reexamination, **30**, 71.
RASTOGI, R. P., SINGH, G., and SINGH, R. R.: Burning Rate Catalysts for Composite Solid Propellants, **30**, 117.
RENIE, J. P.: *See* CONDON, J. A.
RILEY, N.: *See* BIRCHLEY, J. C.
ROPER, F. G.: The Prediction of Laminar Jet Diffusion Flame Sizes: Part I. Theoretical Model, **29**, 219.
ROPER, F. G., SMITH, C. and CUNNINGHAM, A. C.: The Prediction of Laminar Jet Diffusion Flame Sizes: Part II. Experimental Verification, **29**, 227.
RYASON, P. R.: Extended Soot Limits for Rich *n*-Heptane/Air Flames, **29**, 329.

SARADHY, Y. P.: *See* THAPER, K. K.
SAWHNEY, B. K.: *See* SODHA, M. S.

SCHIMMER, H., and VORTMEYER, D.: Acoustical Oscillation in a Combustion System with a Flat Flame, **28**, 17.
SEERY, D. J. and ZABIELSKI, M. F.: Mass Spectrometer Probing of a CO-NH_3-O_2 Flame, **28**, 93.
SERNAS, V.: *See* POLYMEROPOULOS, C. E.
SHARMA, R. P.: *See* SODHA, M. S.
SHOUMAN, A. R. and DONALDSON, A. B.: Prediction of Critical Conditions for Thermal Explosion Problems by a Series Method, **29**, 213.
SINGH, G.: *See* RASTOGI, R. P.
SIRIGNANO, W. A.: *See* FENG, C. C.
SIRIGNANO, W. A.: *See* LAW, C. K.
SLACK, M. W.: Rate Coefficient for $H + O_2 + M = HO_2 + M$ Evaluated from Shock Tube Measurement of Induction Times, **28**, 241.
SLACK, MICHAEL W.: A Comment on the Calculation of Ignition Delay Times for Methane-Oxygen-Nitrogen Dioxide-Argon Mixtures, **30**, 325.
SMITH, C.: *See* ROPER, F. G.
SMITH, M. Y.: *See* DURIE, R. A.
SMOOT, L. D.: *See* HORTON, M. D.
SMY, P. R.: *See* DALE, J. D.
SODHA, M. S., SAWHNEY, B. K., CHANDRA, A., HUSSAIN, S. Q., KAUSHIK, S. C., SHARMA, R. P., and GHATAK, A. K.: Conductivity of Seeded Combustion Products of Acetylene Systems, **28**, 295.
SORENSON, S. C., SAVAGE, L. D., and STREHLOW, R. A.: Reply to the Comment by M. Hertzberg, **28**, 215.
STRAHLE, WARREN, C.: Combustion Randomness and Diesel Engine Noise: Theory and Initial Experiments, **28**, 279.
STRICKER, W. and MEINEL, H.: Raman Analysis of Exhaust Samples in NO_2/NO Converters, **29**, 95.
SUHAS, H. K. and BOSE, T. K.: A Mathematical Model to Predict Transient Burning Rate and Pressure Decay for Extinction of Composite Propellants, **28**, 145.
SUKHININ, A. I.: *See* KONEV, E. V.
SWEAT, JR., R. H.: *See* PANTON, R. L.

TAKAHASHI, A.: *See* YUMOTO, T.
TAKENO, TADAO: Ignition Criterion by Thermal Explosion Theory, **29**, 209.
TAMANINI, FRANCESCO: Reaction Rates, Air Entrainment and Radiation in Turbulent Fire Plumes, **30**, 85.
TELFORD, N. R.: *See* HAYHURST, A. N.
TEWARSON, A.: Reply to Comments of Glassman on Our Paper, **29**, 107.
THAPER, K. K., SARADHY, Y. P., and JAIN, V. K.: The Effect of Lecithin on the Burning Rate of AP-Al-Polyester Propellant, **29**, 325.
TOTH, J. L.: *See* YANNOPOULOS, L. N.

VANDOOREN, J.: *See* BALAKHNINE, V. P.
VAN TIGGELEN, P. J.: *See* BALAKHNINE, V. P.
VARDANYAN, I. A.: *See* NALBANDYAN, A. B.
VETTER, A. A. and CULICK, F. E. C.: Flame Speed of a Low Pressure CS_2/O_2 Flame, **30**, 107.
VISKANTA, R.: *See* HOMMERT, P. J.
VORTMEYER, D.: *See* SCHIMMER, H.
VRANOS, A.: Decomposition of Vaporizing n-Hexadecane, **30**, 151.

WALKER, R. W.: *See* ATRI, G. M.
WALKER, R. W.: *See* BALDWIN, R. R.
WAY-NEE, D.: *See* DALE, J. D.
WHEELER, R. W.: *See* HILLIARD, J. C.
WILLIAMS, F. A.: *See* FERNÁNDEZ-PELLO, A.
WILLIAMS, F. A.: *See* NIIOKA, T.

YANAGI, TETSUI: Effects of Probe Sampling Rates on Sample Composition, **28**, 33.
YANNOPOULOS, L. M., TOTH, J. L., and PEBLER, A.: Experimental Determination of Alkali Impurity Release from Various Dolomites, **30**, 61.
YUMOTO, T., TAKAHASHI, A., and HANDA, T.: Combustion Behavior of Liquid Fuel in a Small Vessel: Effect of Convective Motion in the Liquid on Burning Rate of Hexane in the early Stage of Combustion, **30**, 33.

ZABIELSKI, M. F.: *See* SEERY, D. J.

SUBJECT INDEX

Volumes 28–30, 1977

1. ANALYTICAL MODELING OF COMBUSTION SYSTEMS

Transient Evaporation and Combustion of a Composite Water-Oil Droplet, **29**, 145.

Reaction Rates in Diffusion Flames, **30**, 277.

The Prediction of Laminar Jet Diffusion Flame Sizes: Part I. Theoretical Model, **29**, 219.

A Closure for the Turbulent Premixed Flame with Sequential Chemistry, **30**, 125.

A Theory of Laminar Flame Spread Over Flat Surfaces of Solid Combustibles, **28**, 251.

Further Calculations Based Upon a Theory of Flame Spread Across Solid Fuels, **29**, 247.

Two-Step Sequential Reactions for Large Activation Energies, **29**, 167.

Reaction Rates, Air Entrainment and Radiation in Turbulent Fire Plumes, **30**, 85.

Prediction of Critical Conditions for Thermal Explosion Problems by a Series Method, **29**, 213.

Ignition Criterion by Thermal Explosion Theory, **29**, 209.

The Problem of Liquid Droplet Combustion–A Reexamination, **30**, 71.

Near-Asphyxiated Liquid Fuel Drop Burning, **29**, 277.

The Thermal Ignition Time for Homogeneous Explosives Involving Two Parallel Reactions, **29**, 265.

Ignition of a Reactive Solid in a Hot Stagnation-Point Flow, **29**, 43.

Theory of Quasi-Steady One-Dimensional Diffusional Combustion with Variable Properties Including Distinct Binary Diffusion Coefficients, **29**, 269.

Unsteady Droplet Combustion with Droplet Heating-II: Conduction Limit, **28**, 175.

An Experimental and Analytical Study of Acetylene and Ethylene Oxidation Behind Shock Waves, **29**, 55.

Calculation of the Ignition Delay Times for Methane - Oxygen - Nitrogen Dioxide - Argon Mixtures, **28**, 319.

Slowly Varying Laminar Flames, **28**, 225.

2. ATMOSPHERIC POLLUTION FROM COMBUSTION

Mass Spectrometer Probing of a CO-NH_3-O_2 Flame, **28**, 93.

Reactions of Ammonia and Nitric Oxide in the Burnt Gases of Fuel-Rich Hydrocarbon-Air Flames, **28**, 81.

Raman Analysis of Exhaust Samples in NO_2/NO Converters, **29**, 95.

Combustion and Thermal Decomposition Regions Inside a Burning Cigarette, **30**, 21.

Catalysed Oxidation of Nitric Oxide to Nitrogen Dioxide, **29**, 15.

Combustion Randomness and Diesel Engine Noise: Theory and Initial Experiments, **28**, 279.

The Oxidation of Hydrogen Cyanide in Fuel-Rich Flames, **28**, 113.

A Study of Rich Ammonia/Oxygen/Nitrogen Flames, **30**, 143.

3. BURNING OF LIQUIDS

Soot Formation by Combustion of a Fuel Droplet in High Pressure Gaseous Environments, **29**, 67.

Thermal Radiation from Pool Fires, **29**, 177.

Decomposition of Vaporizing n-Hexadecane, **30**, 151.

Near-Asphyxiated Liquid Fuel Drop Burning, **29**, 277.

Transient Evaporation and Combustion of a Composite Water-Oil Droplet, **29**, 145.

Transient Heating of an Emulsified Water-in-Oil Droplet, **29**, 77.
The Problem of Liquid Droplet Combustion–A Reexamination, **30**, 71.
Combustion Behavior of Liquid Fuel in a Small Vessel: Effect of Convective Motion in the Liquid on Burning Rate of Hexane in the early Stage of Combustion, **30**, 33.

4. BURNING OF SOLIDS AND PLASTICS
Flammability of Plastics-I. Burning Intensity, by A. Tewarson and R. F. Pion, **29**, 103.
Plastic Pool Fires, **30**, 251.
Reply to Comments of Glassman on Our Paper, **29**, 107.
Further Calculations Based Upon a Theory of Flame Spread Across Solid Fuels, **29**, 247.
Theory of Quasi-Steady One-Dimensional Diffusional Combustion with Variable Properties Including Distinct Binary Diffusion Coefficients, **29**, 269.
Ignition of a Reactive Solid in a Hot Stagnation-Point Flow, **29**, 43.
Unsteady Droplet Combustion with Droplet Heating-II: Conduction Limit, **28**, 175.
A Theory of Laminar Flame Spread Over Flat Surfaces of Solid Combustibles, **28**, 251.
Characteristics of Flat, Laminar Coal-Dust Flames, **28**, 187.
Aluminum Ignition, **29**, 1.
The Analysis of Flame Spread Through Forest Fuel, **28**, 217.
A Theory on Transition of Ignition Phase of Coal Particles, **29**, 193.

5. COMBUSTION IN PRACTICAL SYSTEMS
On Laminar Flame Quenching and Its Application to Spark Ignition Engines, **28**, 197.
Combustion Randomness and Diesel Engine Noise: Theory and Initial Experiments, **28**, 279.
The Autoignition of Hydrocarbon Fuels at High Temperatures and Pressures–Fitting of a Mathematical Model, **30**, 45.
Laser-Ignited Internal Combustion Engine, **30**, 319.
Experimental Determination of Alkali Impurity Release from Various Dolomites, **30**, 61.

6. DETONATION WAVES
Electron Impact Induced Dissociative Electron Resonance Capture with Nitrotoluenes, **30**, 103.
Convective Combustion Modeling Applied to Deflagration-to-Detonation Transition of HMX, **30**, 231.
A Comparison of the Critical Energies for Direct Initiation of Spherical Detonations in Acetylene-Oxygen Mixtures, **28**, 61.
Explosive Behavior of Simplified Propellant Models, **29**, 87.

7. DIFFUSION FLAMES
The Predication of Laminar Jet Diffusion Flame Sizes: Part II. Experimental Verification, **29**, 227.
Reaction Rates in Diffusion Flames, **30**, 277.
The Predication of Laminar Jet Diffusion Flame Sizes: Part I. Theoretical Model, **29**, 219.
An Approach to the Theoretical Description of Turbulent Jet Diffusion Flames–Part I: Combustion Model and Calculation, **30**, 163.

8. ELECTRICAL ASPECTS OF FLAMES
Theoretical Chemi-Ionization and Recombination Cross Sections for Reactions of Na and K with Cl, **30**, 243.
Electron Impact Induced Dissociative Electron Resonance Capture with Nitrotoluenes, **30**, 103.
Conductivity of Seeded Combustion Products of Acetylene Systems, **28**, 295.
The Effect of Electrohydrodynamic Boundary Layers on Heat Transfer from Flames Gases, **29**, 33.

9. EXPERIMENTAL TECHNIQUES
Effects of Probe Sampling Rates on Sample Composition, **28**, 33.
Catalysed Oxidation of Nitric Oxide to Nitrogen Dioxide, **29**, 15.
Raman Analysis of Exhaust Samples in NO_2/NO Converters, **29**, 95.
The Prediction of Laminar Jet Diffusion Flame Sizes: Part II. Experimental Verification, **29**, 227.
Vapor-phase Thermal Analysis of Pyrolysis Products from Cellulosic Materials, **30**, 285.

An Improved Seeding Method for High Temperature Laser Doppler Velocimetry, **29**, 333.
Gas Velocity Measurement in Fires by the Cross-Correlation of Random Thermal Fluctuations—A Comparison with Conventional Techniques, **28**, 155.
Measurement of Droplet Size and Fuel-Air Ratio in Sprays, **29**, 123.
A Comment on the Flame Angle, Double-Burner Technique of Determining Flammability Limits, **28**, 213.
Interferometric Study of Nonstationary Combustion Using a N_2 Laser (1 bar), **30**, 207.
Reply to the Comment by M. Hertzberg, **28**, 215.
Mass Spectrometric Sampling of Ions from Atmospheric Pressure Flames-I: Characteristics and Calibration of the Sampling System, **28**, 67.
Flame Temperature Measurements by Spectral Remote Sensing, **30**, 295.
Mass Spectrometric Sampling of Ions from Atmospheric Pressure Flames-III: Boundary Layer and Other Cooling of the Sample, **28**, 137.
Heat and Mass Transfer Considerations in the Use of Electrically Heated Thermocouples of Iridium versus an Iridium/Rhodium Alloy in Atmospheric Pressure Flames, **28**, 301.
The Measurement of the Flammability Limits of Mists, **30**, 309.
Mass Spectrometric Sampling of Ions from Atmospheric Pressure Flames-II: Aerodynamic Disturbance of a Flame by the Sampling System, **28**, 123.

10. EXPLOSIVES AND PYROTECHNICS

Thermochemical Estimation of Explosive Energy Output, **28**, 45.
The Thermal Ignition Time for Homogenous Explosives Involving Two Parallel Reactions, **29**, 265.
Electron Impact Induced Dissociative Electron Resonance Capture with Nitrotoluenes, **30**, 103.

11. FIRE PHENOMENA

Mathematical Model of Wood Pyrolysis Including Internal Forced Convection, **29**, 311.
The Analysis of Flame Spread Through Forest Fuel, **28**, 217.
Trajectory of Firebrands in and out of Fires Whirls, **30**, 321.
Reaction Rates, Air Entrainment and Radiation in Turbulent Fire Plumes, **30**, 85.
Vapor-phase Thermal Analysis of Pyrolysis Products from Cellulosic Materials, **30**, 285.
Gas Velocity Measurement in Fires by the Cross-Correlation of Random Thermal Fluctuations—A Comparison with Conventional Techniques, **28**, 155.
Plastic Pool Fires, **30**, 251.
Thermal Radiation from Pool Fires, **29**, 177.

12. FLAME IGNITION, PROPAGATION, AND FLAMMABILITY LIMITS

Pressures and Their Venting in Spherically Expanding Flames, **30**, 111.
Ignition Delay of Composite Solid Propellants, **28**, 109.
Ignition of a Reactive Solid in a Hot Stagnation-Point Flow, **29**, 43.
The Measurement of the Flammability Limits of Mists, **30**, 309.
A Comment on the Flame Angle, Double-Burner Technique of Determining Flammability Limits, **28**, 213.
Two-Step Sequential Reactions for Large Activation Energies, **29**, 167.
Slowly Varying Laminar Flames, **28**, 225.
Ignition and Thermal Behaviour of Solid Hydrazones, **28**, 101.
Aluminum Ignition, **29**, 1.
The Thermal Ignition Time for Homogeneous Explosives Involving Two Parallel Reactions, **29**, 265.
Reply to the Comment by M. Hertzberg, **28**, 215.
A Comparison of the Critical Energies for Direct Initiation of Spherical Detonations in Acetylene-Oxygen Mixtures, **28**, 61.
Furfurylidene Ketones—A New Class of Hypergolic Rocket Fuels with Red Fuming Nitric Acid (RFNA) as Oxidizer, **28**, 25.
Flame Speed of a Low Pressure CS_2/O_2 Flame, **30**, 107.

13. FLAME INHIBITION, QUENCHING, AND EXTINCTION

A Mathematical Model to Predict Transient Burning Rate and Pressure Decay Rates for Extinction of Composite Propellants, **28**, 145.

Heat and Transfer Considerations in the Use of Electrically Heated Thermocouples of Iridium versus an Iridium/Rhodium Alloy in Atmospheric Pressure Flames, **28**, 301.
On Laminar Flame Quenching and Its Application to Spark Ignition Engines, **28**, 197.

14. FLAME RADIATION, SPECTRA, AND EXCITED SPECIES
Measurement of Absolute Number Density Profiles of CN in a Low Pressure Flame, **29**, 99.
A Study of Rich Ammonia/Oxygen/Nitrogen Flames, **30**, 143.
An Attempt to Correlate the Kinetic and Energetic Data Applying to Excited Species Occurring in Carbon Monoxide Combustion, **30**, 211.

15. FLAME STABILITY
Jet Flame Stabilization in Subsonic and Supersonic Flows, **30**, 187.
Vortex Bursting with Combustion, **30**, 133.
Slowing Varying Laminar Flames, **28**, 225.
Acoustical Oscillation in a Combustion System with a Flat Flame, **28**, 17.

16. FLAME STRUCTURE AND TEMPERATURE
Buoyancy Effects on the Flame Structure in the Wakes of Burning Liquid Drops, **29**, 21.
Flame Temperature Measurements by Spectral Remote Sensing, **30**, 295.
Mass Spectrometric Sampling of Ions from Atmospheric Pressure Flames-III: Boundary Layer and Other Cooling of the Sample, **28**, 137.
A Study of Rich Ammonia/Oxygen/Nitrogen Flames, **30**, 143.
Mass Spectrometric Sampling of IOns From Atmospheric Pressure Flames-II: Aerodynamic Disturbance of a Flame by the Sampling System, **28**, 123.
The Oxidation of Hydrogen Cyanide in Fuel-Rich Flames, **28**, 113.
Measurement of Absolute Number Density Profiles of CN in a Low Pressure Flame, **29**, 99.
Reactions of Ammonia and Nitric Oxide in the Burnt Gases of Fuel-Rich Hydrocarbon-Air Flames, **28**, 81.
Mass Spectrometer Probing of a $CO\text{-}NH_3\text{-}O_2$ Flame, **28**, 93.
Reaction Mechanism and Rate Constants in Lean Hydrogen-Nitrous Oxide Flames, **28**, 165.

17. FLUID DYNAMICS IN COMBUSTION
Investigation of Combustion Phenomena Associated with the Flow of Hot Propellant Gases. III: Experimental Survey of the Formation and Decay of Muzzle Flow Fields and of Pressure Measurements, **29**, 289.
The Effect of Electrohydrodynamic Boundary Layers on Heat Transfer from Flame Gases, **29**, 33.
Jet Flame Stabilization in Subsonic and Supersonic Flows, **30**, 187.
Gas Velocity Measurement in Fires by the Cross-Correlation of Random Thermal Fluctuations—A Comparison with Conventional Techniques, **28**, 155.
Buoyancy Effects on the Flame Structure in the Wakes of Burning Liquid Drops, **29**, 21.
Mass Spectrometric Sampling of Ions from Atmospheric Pressure Flames-II: Aerodynamic Disturbance of a Flame by the Sampling System, **28**, 123.
Combustion Behavior of Liquid Fuel in a Small Vessel: Effect of Convective Motion in the Liquid on Burning Rate of Hexane in the early Stage of Combustion, **30**, 33.
Trajectory of Firebrands in and out of Fire Whirls, **30**, 321.
Autoignition and Cool-Flame Behavior in a Convective System, **28**, 207.

18. HETEROGENEOUS OR CATALYTIC COMBUSTION
Catalytic Combustion of Pre-Mixed Hydrogen-Air, **30**, 193.
Combustion and Thermal Decomposition Regions Inside a Burning Cigarette, **30**, 21.
Burning Rate Catalysts for Composite Solid Propellants, **30**, 117.

19. KINETICS AND MECHANISM OF COMBUSTION REACTIONS
The Mechanism of Conjugate Alkene Formation and the Importance of Surface Reactions in Hydrocarbon Oxidation, **30**, 13.

Reply to Michael W. Slack's Comment, **30**, 327.
A Comment on the Calculation of Ignition Delay Times for Methane-Oxygen-Nitrogen Dioxide-Argon Mixtures, **30**, 327.
The Use of ESR Measurements to Study the Role of the Surface in Acetaldehyde Oxidation, **30**, 177.
The Reaction of OH Radicals and HO_2 Radicals with Carbon Monoxide, **30**, 1.
Gas-Phase Reactions of Alkylperoxy and Alkoxy Radicals Part I. The Photoinitiated Oxidation of 2, 3-Dimethylbutane, **29**, 133.
An Attempt to Correlate the Kinetic and Energetic Data Applying to Excited Species Occurring in Carbon Monoxide Combustion, **30**, 211.
Reactions to Ammonia and Nitric Oxide in the Burnt Gases of Fuel-Rich Hydrocarbon-Air Flames, **28**, 81.
The Autoignition of Hydrocarbon Fuels at High Temperatures and Pressures–Fitting of a Mathematical Model, **30**, 45.
Mass Spectrometer Probing of a CO-NH_3-O_2 Flame, **28**, 93.
The Oxidation of Hydrogen Cyanide in Fuel-Rich Flames, **28**, 113.
Reaction Mechanism and Rate Constants in Lean Hydrogen-Nitrous Oxide Flames, **28**, 165.
An Experimental and Analytical Study of Acetylene and Ethylene Oxidation Behind Shock Waves, **29**, 55.
Calculation of the Ignition Delay Times for Methane - Oxygen - Nitrogen Dioxide - Argon Mixtures, **28**, 319.
Theoretical Chemi-Ionization and Recombination Cross Sections for Reactions of Na and K with Cl, **30**, 267.
Reaction Rates in Diffusion Flames, **30**, 277.
Rate Coefficient for $H + O_2 + M = HO_2 + M$ Evaluated from Shock Tube Measurement of Induction Times, **28**, 241.

20. LOW TEMPERATURE OXIDATION
Autoignition and Cool-Flame Behavior in a Convective System, **28**, 207.
Gas-Phase Reactions of Alkylperoxy and Alkoxy Radicals Part I. The Photoinitiated Oxidation of 2, 3-Dimethylbutane, **29**, 133.
The Use of ESR Measurements to Study the Role of the Surface in Acetaldehyde Oxidation, **30**, 177.
Decomposition of Vaporizing n-Hexadecane, **30**, 151.
The Mechanism of Conjugate Alkene Formation and the Importance of Surface Reactions in Hydrocarbon Oxidation, **30**, 13.

21. MODELING AND SCALING IN COMBUSTION PROCESSES
Velocity Histories of Vaporizing Fuel Drops Injected Downward-Effect of Index n in the "*Dn*-Law," **29**, 283.
A Theory on Transition of Ignition Phase of Coal Particles, **29**, 193.
Transient Heating of an Emulsified Water-in-Oil Droplet, **29**, 77.
Thermal Radiation from Pool Fires, **29**, 177.
The Analysis of Flame Spread Through Forest Fuel, **28**, 217.
Convective Combustion Modeling Applied to Deflagration-to-Detonation Transition of HMX, **30**, 231.
The Autoignition of Hydrocarbon Fuels at High Temperatures and Pressures–Fitting of a Mathematical Model, **30**, 45.
Catalytic Combustion of Pre-Mixed Hydrogen-Air, **30**, 193.
An Approach to the Theoretical Description of Turbulent Jet Diffusion Flames–Part I: Combustion Model and Calculation, **30**, 163.
A Comparison of the Critical Energies for Direct Initiation of Spherical Detonations in Acetylene-Oxygen Mixtures, **28**, 61.
Mathematical Model of Wood Pyrolysis Including Internal Forced Convection, **29**, 311.
On Laminar Flame Quenching and Its Application to Spark Ignition Engines, **28**, 197.
Combustion and Thermal Decomposition Regions Inside a Burning Cigarette, **30**, 21.
Temperature Sensitivity of Propellant Burning Rates, **30**, 243.
Pressures and Their Venting in Spherically Expanding Flames, **30**, 111.
A Mathematical Model to Predict Transient Burning Rate and Pressure Decay Rates for Extinction of Composite Propellants, **28**, 145.

Thermochemical Estimation of Explosive Energy Output, **28**, 45.
Combustion Randomness and Diesel Engine Noise: Theory and Initial Experiments, **28**, 279.
Conductivity of Seeded Combustion Products of Acetylene Systems, **28**, 295.
The Modeling of Turbulent Premixed and Diffusion Combustion in the Computation of Engineering Flows, **29**, 111.
The Implications of the Probability Equations for Turbulent Combustion Models, **29**, 235.

22. NEW COMBUSTION SYSTEMS, NEW APPLICATIONS
Laser-Ignited Internal Combustion Engine, **30**, 319.

23. PARTICLES AND DROPLETS
Buoyance Effects on the Flame Structure in the Wakes of Burning Liquid Drops, **29**, 21.
Theory of Quasi-Steady One-Dimensional Diffusional Combustion with Variable Properties Including Distinct Binary Diffusion Coefficients, **29**, 269.
Transient Heating of an Emulsified Water-in-Oil Droplet, **29**, 77.
The Measurement of the Flammability Limits of Mists, **30**, 309.
Transient Evaporation and Combustion of a Composite Water-Oil Droplet, **29**, 145.
Soot Formation by Combustion of a Fuel Droplet in High Pressure Gaseous Environments, **29**, 67.
Unsteady Droplet Combustion with Droplet Heating-II: Conduction Limit, **28**, 175.
Near-Asphyxiated Liquid Fuel Drop Burning, **29**, 277.
Characteristics of Flat, Laminar Coal-Dust Flames, **28**, 187.
The Problem of Liquid Droplet Combustion–A Reexamination, **30**, 71.
Measurement of Droplet Size and Fuel-Air Ratio in Sprays, **29**, 123.
Velocity Histories of Vaporizing Fuel Drops Injected Downward-Effect of Index *n* in the "*Dn*-Law," **29**, 283.
Shock-Wave Chemistry in Dusty Gases and Fogs: A Review, **28**, 3.

24. PROPELLANTS
Ignition Delay of Composite Solid Propellants, **28**, 109.
A Mathematical Model to Predict Transient Burning Rate and Pressure Decay Rates for Extinction of Composite Propellants, **28**, 145.
Temperature Sensitivity of Propellant Burning Rates, **30**, 243.
Explosive Behavior of Simplified Propellant Models, **29**, 87.
Investigation of Combustion Phenomena Associated with the Flow of Hot Propellant Gases. III: Experimental Survey of the Formation and Decay of Muzzle Flow Fields and of Pressure Measurements, **29**, 289.
Ignition and Thermal Behavior of Solid Hydrazones, **28**, 101.
Furfurylidene Ketones–A New Class of Hypergolic Rocket Fuels with Red Fuming Nitric Acid (RFNA) as Oxidizer, **28**, 25.
Burning Rate Catalysts for Composite Solid Propellants, **30**, 117.
Effect of Pressure on Heat of Explosion, **28**, 291.
The Effect of Lecithin on the Burning Rate of AP-Al-Polyester Propellant, **29**, 325.

25. SOOT AND INORGANIC SPECIES
Extended Soot Limits for Rich *n*-Heptane/Air Flames, **29**, 329.
Soot Formation by Combustion of a Fuel Droplet in High Pressure Gaseous Environments, **29**, 67.
Experimental Determination of Alkali Impurity Release from Various Dolomites, **30**, 61.
The Deposition of Salts from Hydrocarbon Flames Containing Sodium and Sulphur Species, **30**, 221.

26. SPONTANEOUS IGNITION AND COMBUSTION IN VESSELS
Calculation of the Ignition Delay Times for Methane - Oxygen - Nitrogen Dioxide - Argon Mixtures, **28**, 319.

A Comment on the Calculation of Ignition Delay Times for Methane-Oxygen-Nitrogen Dioxide-Argon Mixtures, **30**, 325.
Ignition Criterion by Thermal Explosion Theory, **29**, 209.
The Autoignition of Hydrocarbon Fuels at High Temperatures and Pressures–Fitting of a Mathematical Model, **30**, 45.
Prediction of Critical Conditions for Thermal Explosion Problems of a Series Method, **29**, 213.
Rate Coefficient for H + O_2 + M = M Evaluated from Shock Tube Measurement of Induction Times, **28**, 241.
Autoignition and Cool-Flame Behavior in a Convective System, **28**, 207.
Reply to Michael W. Slack's Comment, **30**, 327.

27. SUPERSONIC REACTING FLOW
An Experimental and Analytical Study of Acetylene and Ethylene Oxidation Behind Shock Waves, **29**, 55.
Rate Coefficient for H + O_2 + M = HO_2 + M Evaluated from Shock Tube Measurement of Induction Times, **28**, 241.
Shock-Wave Chemistry in Dusty Gases and Fogs: A Review, **28**, 3.

28. THERMAL DECOMPOSITION PROCESSES
Mathematical Model of Wood Pyrolysis Including Internal Forced Convection, **29**, 311.
Vapor-phase Thermal Analysis of Pyrolysis Products from Cellulosic Materials, **30**, 285.
Decomposition of Vaporizing n-Hexadecane, **30**, 151.

29. THERMOCHEMISTRY AND THERMODYNAMICS
Thermochemical Estimation of Explosive Energy Output, **28**, 45.
Effect of Pressure on Heat of Explosion, **28**, 291.
The Deposition of Salts from Hydrocarbon Flames Containing Sodium and Sulphur Species, **30**, 221.

30. TURBULENCE IN FLAMES
A Closure for the Turbulent Premixed Flame with Sequential Chemistry, **30**, 125.
The Modelling of Turbulent Premixed and Diffusion Combustion in the Computation of Engineering Flows, **29**, 111.
Vortex Bursting with Combustion, **30**, 133.
Reaction Rates, Air Entrainment and Radiation in Turbulent Fire Plumes, **30**, 85.
Combustion Randomness and Diesel Engine Noise: Theory and Initial Experiments, **28**, 279.
An Approach to the Theoretical Description of Turbulent Jet Diffusion Flames-Part I: Combustion Model and Calculation, **30**, 163.
The Implications of the Probability Equations for Turbulent Combustion Models, **29**, 235.